T 1.11/3: 10/50

Customs Bulletin

Regulations, Rulings, Decisions, and Notices concerning Customs and related matters

and Decisions

of the United States Court of Customs and Patent Appeals and the United States Customs Court

Vol. 10 DECEMBER 15, 1976 No. 50

RECEIVED
MIAMI UNIVERSITY
LIBRARIES
JAN 05 1977
DEPOSITORY
DOCUMENTS DEPARTMENT

This issue contains

T.D. 76-329 through 76-335
C.D. 4673
Protest abstracts P76/270 and P76/271
Reap. abstract R76/125
INTERNATIONAL TRADE COMMISSION NOTICE

DEPARTMENT OF THE TREASURY
U.S. Customs Service

NOTICE

The abstracts, rulings, and notices which are issued weekly by the U.S. Customs Service are subject to correction for typographical or other printing errors. Users may notify the U.S. Customs Service, Logistics Management Division, Washington, D.C. 20229, of any such errors in order that corrections may be made before the bound volumes are published.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price 85 cents (single copy). Subscription price: $42.70 a year; $10.95 additional for foreign mailing.

U.S. Customs Service

(T.D. 76-329)

Customhouse Broker's License—Customs Regulations amended

Section 111.13(b), Customs Regulations, relating to the time at which the customhouse broker's license examination will be given, amended

DEPARTMENT OF THE TREASURY,
OFFICE OF THE COMMISSIONER OF CUSTOMS,
Washington, D.C.

TITLE 19—CUSTOMS DUTIES

CHAPTER I—UNITED STATES CUSTOMS SERVICE

PART 111 – CUSTOMHOUSE BROKERS

On June 21, 1976, a notice of proposed rulemaking was published in the FEDERAL REGISTER (41 FR 24889), which proposed to amend paragraph (b) of section 111.13 of the Customs Regulations (19 CFR 111.13(b)) to provide that the customhouse broker's license examination will be given at each district office on the first Monday in April and October of each year.

Section 111.13(b) presently provides that the customhouse broker's license examination will be given at each district office on the first Monday in February, June, and October of each year. A review of the statistics maintained regarding past examinations reveals that if the examinations were given only twice a year, all districts could easily accommodate the expected increased number of applicants at each examination and that a cost saving to the Government would result. Moreover, the expected increase in administration of special examinations under section 111.13(c) of the Customs Regulations (19 CFR 111.13(c)) would be slight.

Interested persons were given 30 days from the date of publication of the notice to submit data, views, or arguments with respect to the proposed amendment. No comments were received.

U.S. Customs Service

(T.D. 76-329)

Customhouse Broker's License—Customs Regulations Amended

Section 111.13(b), Customs Regulations, relating to the time at which the customhouse broker's license examination will be given, amended

DEPARTMENT OF THE TREASURY,

OFFICE OF THE COMMISSIONER OF CUSTOMS,

Washington, D.C.

TITLE 19—CUSTOMS DUTIES

CHAPTER I—UNITED STATES CUSTOMS SERVICE

PART 111 – CUSTOMHOUSE BROKERS

On June 21, 1976, a notice of proposed rulemaking was published in the FEDERAL REGISTER (41 FR 25359), which proposed to amend paragraph (b) of section 111.13 of the Customs Regulations (19 CFR 111.13(b)) to provide that the customhouse broker's license examination will be given at each district office on the first Monday in April and October of each year.

Section 111.13(b) presently provides that the customhouse broker's license examination will be given at each district office on the first Monday in February, June, and October of each year. A review of the statistics maintained regarding past examinations reveals that if the examinations were given only twice a year, all districts could easily accommodate the expected increased number of applicants at each examination and that a cost saving to the Government would result. Moreover, the expected increase in administration of special examinations under section 111.13(c) of the Customs Regulations (19 CFR 111.13(c)) would be slight.

Interested persons were given 30 days from the date of publication of the notice to submit data, views, or arguments with respect to the proposed amendment. No comments were received.

Accordingly, the proposed amendment is adopted as set forth below.

Effective date. This amendment shall become effective 30 days after publication in the FEDERAL REGISTER. (095007)

(ADM-9-03)

VERNON D. ACREE,
Commissioner of Customs.

Approved November 24, 1976,

JERRY THOMAS,
Under Secretary of the Treasury.

[Published in the FEDERAL REGISTER December 3, 1976 (41 FR 53001)]

PART 111 — CUSTOMHOUSE BROKERS

The first sentence of paragraph (b) of section 111.13 is amended to read as follows:

§ 111.13 Examination of applicant for individual license.

* * * * * * * * *

(b) *Date and place of examination.* Examinations will be given at each district office on the first Monday in April and October. * * *

* * * * * * * * *

(R.S. 251, as amended, secs. 624, 641, 46 Stat. 759, as amended (19 U.S.C. 66, 1624, 1641))

(T.D. 76-330)

Foreign currencies—Daily rates for countries not on quarterly list

Rates of exchange certified to the Secretary of the Treasury by the Federal Reserve Bank of New York for the Hong Kong dollar, Iran rial, Philippines peso, Singapore dollar, Thailand baht (tical)

DEPARTMENT OF THE TREASURY,
OFFICE OF THE COMMISSIONER OF CUSTOMS,
Washington, D.C., October 29, 1976.

The Federal Reserve Bank of New York, pursuant to section 522(c), Tariff Act of 1930, as amended (31 U.S.C. 372(c)), has certified buying rates in U.S. dollars for the dates and foreign currencies shown below. These rates of exchange are published for the information and use of Customs officers and others concerned pursuant to Part 159, Subpart C, Customs Regulations (19 CFR 159, Subpart C).

Hong Kong dollar:	
October 25, 1976	$0.2065
October 26, 1976	0.2073
October 27, 1976	0.2068
October 28, 1976	0.2071
October 29, 1976	0.2069
Iran rial:	
October 25, 1976	$0.0141
October 26, 1976	0.0141
October 27, 1976	0.0141
October 28, 1976	0.0141
October 29, 1976	0.0140
Philippines peso:	
October 25, 1976	$0.1320
October 26, 1976	0.1320
October 27, 1976	0.1320
October 28, 1976	0.1320
October 29, 1976	0.1310
Singapore dollar:	
October 25, 1976	$0.4076
October 26, 1976	0.4072
October 27, 1976	0.4070
October 28, 1976	0.4072
October 29, 1976	0.4076

Thailand baht (tical):
October 25–29, 1976 ..... $0.0490

(LIQ-3)

JOHN B. O'LOUGHLIN,
Director,
Duty Assessment Division.

(T.D. 76-331)

Foreign Currencies—Certification of Rates

Rates of exchange certified to the Secretary of the Treasury by the Federal Reserve Bank of New York

DEPARTMENT OF THE TREASURY,
OFFICE OF THE COMMISSIONER OF CUSTOMS,
Washington, D.C., November 17, 1976.

The Federal Reserve Bank of New York, pursuant to section 522(c), Tariff Act of 1930, as amended (31 U.S.C. 372(c)), has certified the following rates of exchange which varied by 5 per centum or more from the quarterly rate published in Treasury Decision 76-293 of the following countries. Therefore, as to entries covering merchandise exported on the dates listed, whenever it is necessary for Customs purposes to convert such currency into currency of the United States, conversion shall be at the following daily rates:

Ireland pound:
October 29, 1976 ..... $1.5665

Mexico peso:
October 27, 1976 ..... $0.0377
October 28, 1976 ..... 0.0384
October 29, 1976 ..... 0.0390

(LIQ-3)

JOHN B. O'LOUGHLIN,
Director,
Duty Assessment Division.

(T.D. 76-332)

Foreign currencies—Daily rates for countries not on quarterly list

Rates of exchange certified to the Secretary of the Treasury by the Federal Reserve Bank of New York for the Hong Kong dollar, Iran rial, Philippines peso, Singapore dollar, Thailand baht (tical)

DEPARTMENT OF THE TREASURY,
OFFICE OF THE COMMISSIONER OF CUSTOMS,
Washington, D.C., November 5, 1976.

The Federal Reserve Bank of New York, pursuant to section 522(c), Tariff Act of 1930, as amended (31 U.S.C. 372(c)), has certified buying rates in U.S. dollars for the dates and foreign currencies shown below. These rates of exchange are published for the information and use of Customs officers and others concerned pursuant to Part 159, Subpart C, Customs Regulations (19 CFR 159, Subpart C).

Hong Kong dollar:	
November 1, 1976	$0.2071
November 2, 1976	Holiday
November 3, 1976	0.2071
November 4, 1976	0.2075
November 5, 1976	0.2077
Iran rial:	
November 1, 1976	$0.0140
November 2, 1976	Holiday
November 3, 1976	0.0140
November 4, 1976	0.0140
November 5, 1976	0.0141
Philippines peso:	
November 1–5, 1976	$0.1310
Singapore dollar:	
November 1, 1976	$0.4074
November 2, 1976	Holiday
November 3, 1976	0.4072
November 4, 1976	0.4072
November 5, 1976	0.4068

Thailand baht (tical):	
November 1, 1976	$0.0490
November 2, 1976	Holiday
November 3, 1976	0.0490
November 4, 1976	0.0490
November 5, 1976	0.0495

(LIQ-3)

JOHN B. O'LOUGHLIN,
Director,
Duty Assessment Division.

(T.D. 76-333)

Foreign Currencies—Certification of Rates

Rates of exchange certified to the Secretary of the Treasury by the Federal Reserve Bank of New York

DEPARTMENT OF THE TREASURY,
OFFICE OF THE COMMISSIONER OF CUSTOMS,
Washington, D.C., November 17, 1976.

The Federal Reserve Bank of New York, pursuant to section 522(c), Tariff Act of 1930, as amended (31 U.S.C. 372(c)), has certified the following rates of exchange which varied by 5 per centum or more from the quarterly rate published in Treasury Decision 76-293 of the following countries. Therefore, as to entries covering merchandise exported on the dates listed, whenever it is necessary for Customs purposes to convert such currency into currency of the United States, conversion shall be at the following daily rates:

Mexico peso:	
November 1, 1976	$0.0390
November 3, 1976	0.0392
November 4, 1976	0.0401
November 5, 1976	0.0403
Norway krone:	
November 5, 1976	$0.1687

(LIQ-3)

JOHN B. O'LOUGHLIN,
Director,
Duty Assessment Division.

224-164—76——2

(T.D. 76-334)

Foreign currencies—Daily rates for countries not on quarterly list

Rates of exchange certified to the Secretary of the Treasury by the Federal Reserve Bank of New York for the Hong Kong dollar, Iran rial, Philippines peso, Singapore dollar, Thailand baht (tical)

DEPARTMENT OF THE TREASURY,
OFFICE OF THE COMMISSIONER OF CUSTOMS,
Washington, D.C., November 12, 1976.

The Federal Reserve Bank of New York, pursuant to section 522(c), Tariff Act of 1930, as amended (31 U.S.C. 372(c)), has certified buying rates in U.S. dollars for the dates and foreign currencies shown below. These rates of exchange are published for the information and use of Customs officers and others concerned pursuant to Part 159, Subpart C, Customs Regulations (19 CFR 159, Subpart C).

Hong Kong dollar:	
November 8, 1976	$0.2082
November 9, 1976	0.2089
November 10, 1976	0.2088
November 11, 1976	Holiday
November 12, 1976	0.2087
Iran rial:	
November 8, 1976	$0.0141
November 9, 1976	0.0141
November 10, 1976	0.0141
November 11, 1976	Holiday
November 12, 1976	0.0143
Philippines peso:	
November 8, 1976	$0.1310
November 9, 1976	0.1310
November 10, 1976	0.1310
November 11, 1976	Holiday
November 12, 1976	0.1320
Singapore dollar:	
November 8, 1976	$0.4072
November 9, 1976	0.4072
November 10, 1976	0.4072
November 11, 1976	Holiday
November 12, 1976	0.4070

Thailand baht (tical):

November 8, 1976	$0.0495
November 9, 1976	0.0495
November 10, 1976	0.0495
November 11, 1976	Holiday
November 12, 1976	0.0490

(LIQ-3)

JOHN B. O'LOUGHLIN,
Director,
Duty Assessment Division.

(T.D. 76-335)

Foreign Currencies—Certification of Rates

Rates of exchange certified to the Secretary of the Treasury by the Federal Reserve Bank of New York

DEPARTMENT OF THE TREASURY,
OFFICE OF THE COMMISSIONER OF CUSTOMS,
Washington, D.C., November 17, 1976.

The Federal Reserve Bank of New York, pursuant to section 522(c), Tariff Act of 1930, as amended (31 U.S.C. 372(c)), has certified the following rates of exchange which varied by 5 per centum or more from the quarterly rate published in Treasury Decision 76-293 of the following countries. Therefore, as to entries covering merchandise exported on the dates listed, whenever it is necessary for Customs purposes to convert such currency into currency of the United States, conversion shall be at the following daily rates:

Mexico peso:

November 8, 1976	$0.0403
November 9, 1976	0.0403
November 10, 1976	0.0407
November 12, 1976	0.0404

(LIQ-3)

JOHN B. O'LOUGHLIN,
Director,
Duty Assessment Division.

Decisions of the United States Customs Court

United States Customs Court
One Federal Plaza
New York, N.Y. 10007

Chief Judge
Nils A. Boe

Judges
Paul P. Rao
Morgan Ford
Scovel Richardson
Frederick Landis
James L. Watson
Herbert N. Maletz
Bernard Newman
Edward D. Re

Senior Judges
Mary D. Alger
Samuel M. Rosenstein

Clerk
Joseph E. Lombardi

Customs Decision

(C.D. 4673)

AMELIOTEX, INC. *v.* UNITED STATES

Elastomeric fiber—Multifilament yarn

"Sarlane," elastomeric fiber imported from Belgium, was classified as a monofilament under item 309.03 or 309.06 of the tariff schedules, depending on the denier of the fiber, and assessed with duty, respectively, at the rate of 35 or 24 percent ad valorem. Plaintiff contested the classification claiming that the imported yarn consisted of strands which are not monofilaments, as classified by the customs officials, but rather multifilaments, or grouped filaments, properly dutiable at the rate of 14.5 percent ad valorem under item 309.31. *Held:* Since plaintiff did not succeed in proving that Sarlane was a multifilament, i.e., grouped filaments, as claimed, and not a monofilament, as classified, the claim is overruled.

MONOFILAMENT

The statutory definition of "monofilaments" is not limited to single filaments, but also includes single filaments "produced from two or more filaments fused or bonded together."

The exhibits and expert testimony indicate that the filaments of Sarlane have been fused or bonded together during the production process so as to constitute a monofilament, as classified.

EXPERT TESTIMONY

In cases depending upon technical factual data, in large measure, the court's finding is based upon its evaluation of the expert testimony.

Although the expert witnesses agreed on the nature of the manufacturing process, they differed on the effect of that process upon the filaments and whether it caused a "fusing" or "bonding." On this phase of the case, the court accepted the testimony of defendant's expert that the filaments of Sarlane have been fused or bonded during the production process so as to constitute a monofilament.

PRESUMPTION OF CORRECTNESS—BURDEN OF PROOF

In order to overcome the presumption of correctness attaching to the classification of the customs officials, plaintiff must prove that the classification is erroneous, and that the claimed classification is correct. *United States* v. *New York Merchandise Co., Inc.*, 58 CCPA 53, C.A.D. 1004, 435 F. 2d 1315 (1970); *Technical Tape Corp.* v. *United States*, 55 CCPA 38, C.A.D. 931 (1968).

In the case at bar, plaintiff has not borne its dual burden in proving that Sarlane consists of "multifilaments" or "grouped filaments" and not "monofilaments," Specifically, plaintiff has not proved that the Sarlane filaments have not been fused or bonded together during the production process.

Court No. 71-10-01429

Port of New York

[Judgment for defendant.]

(Decided November 19, 1976)

Rode & Qualey (*John S. Rode* and *Michael S. O'Rourke* of counsel) for the plaintiff.

Rex E. Lee, Assistan Attorney General (*John A. Gussow*, trial attorney), for the defendant.

RE, Judge: The question presented in this case pertains to the proper classification, for customs duty purposes, of certain Sarlane elastomeric fiber, invoiced as "Spandex Elastomeric Multi-Filament Yarns."

The merchandise, imported from Belgium in 1970, was classified as a monofilament under item 309.03 or 309.06 of the Tariff Schedules of the United States [TSUS], as modified by T.D. 68–9, depending on the denier of the fiber (not presently at issue), and assessed with duty, respectively, at the rate of 35 or 24 percent ad valorem.

It is plaintiff's contention that the imported yarn consists of strands which are not monofilaments, as classified by the customs officials, but rather multifilaments, or grouped filaments, which have not been subjected to such processes as twisting and untwisting, false twisting, crimping, and curling. Hence, plaintiff protests the classification, and claims that the merchandise is properly dutiable at the rate of 14.5 percent ad valorem under item 309.31, as modified by T.D. 68–9.

The tariff schedules in schedule 3, part 1, subpart E, headnote 3 contain the following pertinent definitions:

> "(b) the term 'monofilaments' embraces single filaments (including single filaments of laminated construction or produced from two or more filaments fused or bonded together), whether solid or hollow, whether flat, oval, round, or of any other cross-sectional configuration, which are not over 0.06 inch in maximum cross-sectional dimension;
>
> * * * * * * *
>
> (e) the term 'grouped filaments . . .' embraces two or more filaments . . . grouped together with the filaments . . . substantially parallel and not twisted, but the term does not include grouped filaments which have been subjected to processes such as twisting and untwisting, false twisting, crimping, and curling, and which are useable as yarns;"

Items 309.03 and 309.06 of the tariff schedules, pursuant to which the merchandise was classified, provide as follows:

	"Monofilaments (in continuous form), with or without twist, whether known as monofils, artificial horsehair, artificial straw, yarns, or by any other name:	
	Not over 150 denier:	
	* * * * * * *	
309.03	Valued over 80 cents per pound	35% ad val.
	Over 150 denier:	
	* * * * * * *	
309.06	Valued over 85 cents per pound	24% ad val."

Plaintiff claims that the merchandise is dutiable pursuant to item 309.31 which provides:

> "Grouped filaments . . . (in continuous form), whether known as tow, yarns, or by any other name:
>
> Wholly of grouped filaments (except laminated filaments and plexiform filaments):
>
> * * * * * * *
>
> Other:
>
> * * * * * * *
>
> 309.31 Valued over 80 cents per pound ..... 14.5% ad val."

"Sarlane," the trade name of plaintiff's product, is a "spandex" fiber noted for its elastomeric properties, i.e., the ability to stretch and recoil with a high and rapid recovery. It is used particularly in foundation garments, waistbands, sportswear, and sport hosiery.

Whether Sarlane yarn consists of "monofilaments," as classified by the customs officials, or "multifilaments" or "grouped filaments," as claimed by plaintiff, is a question of first impression before this court. In the last analysis, its determination depends upon the technical factual data presented. In large measure, the court's finding is based upon its evaluation of the expert testimony of the witnesses. More specifically, the decision must be grounded upon what occurred during the production or manufacture of Sarlane, and particularly in the drying process. In view of the importance of the expert testimony, and the technical aspects of the production of Sarlane, it will be necessary to summarize the evidence in some detail.

The record consists of the testimony of five witnesses, three called by the plaintiff, and two by the defendant. Of the seventeen exhibits in evidence, eight were introduced by plaintiff, and nine by defendant.

It must be noted, at the outset, that the statutory definition of "monofilaments" set forth in headnote 3(b) is not limited to single filaments, but also includes single filaments "produced from two or more filaments fused or bonded together." It is, therefore, inconclusive to assert that Sarlane consists of individual filaments. The important question is whether the filaments have been "fused" or "bonded." Apart from the definitions submitted by the expert witnesses who testified in this case, reference has been made to the various technical dictionaries that define these words. *Bonding* is described as a method of pressing fibers into thin sheets or webs that are held together by adhesive chemicals. See *Fairchild's Dictionary of Textiles* 71 (1967); *Encyclopedia of Textiles* 501 (1969). *Fused* is defined by *Webster's*

Third New International Dictionary 925 (1961) as "melted together: united by heating . . . reduced to liquid by heat; MOLTEN." The *Encyclopedia of Textiles* 508 (1969) also defines "fuse" as "[t]o melt with the application of heat."

By their pleadings, the parties have narrowed the issue presented, and have agreed that Sarlane is neither of laminated construction, nor plexiform filaments, nor strips over 0.06 inch, but less than one inch in width, and not over 0.01 inch in thickness. The parties have also agreed that the merchandise is valued at over 80 cents per pound.

The question presented, therefore, is whether plaintiff has borne its burden of proof that Sarlane should have been classified as a multifilament or grouped filament, rather than a monofilament as found by the customs officials. Under the pertinent tariff provisions, it is clear that plaintiff cannot succeed unless it can prove that the filaments in the Sarlane fiber have not been fused or bonded together so as to constitute a monofilament. If a fusing or bonding has occurred, the imported merchandise has been correctly classified and the protest must be denied.

Dr. Timothy V. Peters, founder and president of plaintiff corporation, holds a doctorate from Rutgers University for majors in physical and analytical chemistry, and has nearly nineteen years experience in research, development, and production of spandex fibers. He holds U.S. patent No. 3,699,205, and the Belgian and Japanese equivalents which cover the process he invented for the manufacture of Sarlane fiber. A Belgian company, Fabelta, Division of U.C.B., and a Japanese company, Fuji Spinning Company, Ltd., have been licensed to produce Sarlane under Dr. Peter's patents. The merchandise at bar is representative of the Sarlane produced in Belgium.

Plaintiff introduced into evidence a schematic process flow chart to describe the patented method of production of Sarlane in Belgium. It was used by Dr. Peters to describe the process from its basic raw materials, through a reaction producing polyurethane in solution, to extrusion of the fully reacted product through a spinnerette whereby ten groups of filaments, eighteen filaments to a group, are produced. He explained how the individual filaments are lead through extraction baths to extract the solvent, gathered into groups of eighteen, dried to remove any individual water, lubricated as a group to prevent sticking together, wound onto packages, inspected and shipped to customers. Dr. Peters also contrasted this wet spinning process, by which Sarlane is produced, with three other manufacturing processes for the production of spandex fibers.

The testimony reveals that the melting point of Sarlane is between 240 and 245 degrees centigrade, and that during its production process, Sarlane is not exposed to temperatures greater than 190 to 195 degrees centigrade. Dr. Peters testified that at 195 degrees centigrade, reached during the drying process, Sarlane filaments are capable of "flow and creep." Predicated upon this testimony, the defendant, in its post-trial brief, submits that this phenomenon indicates that the filaments have been fused. Plaintiff explains that the terms "flow" and "creep," as used by Dr. Peters, only indicate the potential of the Sarlane molecules to flow by one another "inside the individual filament itself," in a time-dependent process to relieve internal stress. Dr. Peters testified that Sarlane "does not melt at all in the process of manufacture" permitting each individual filament to maintain the "same outward appearance" during this phenomenon. He added that elastomeric products such as Sarlane do have, however, a "natural tack" which causes the eighteen individual filaments to remain in a group rather than coalesce. He attributed this to the low modulus of the filaments which permits a maximum area of surface contact.

Dr. Peters asserted that the eighteen filaments in a strand of Sarlane could be separated by hand manipulation. Having testified that "two or three separate filaments" had been separated from the strand, he stated that with time he could separate all eighteen. He explained the fact that the separate filaments could not be put together after being pulled apart by the inability to achieve "the same degree of surface contact or of surface congruency that existed before I broke them [the filaments] apart."

Defendant, in its brief, contends that this "breaking experiment" proves the defendant's position, i.e., that Dr. Peters "could only break . . . [the strand] into three coalesced bundles . . . . Rather than separating the spandex fiber at issue . . . Dr. Peters . . . caused the fiber to *rupture*, precluding any concept of mere separation of separate fibers."

Dr. Samuel J. Golub, an expert witness called by plaintiff, specializes in fiber analysis, research in fabric defects, and related textile studies. He holds bachelor's and master's degrees in biology from the University of Massachusetts, and a doctorate from Harvard. He is presently the assistant director of Fabric Research Laboratories, Dedham, Massachusetts, the largest independent textile research laboratory in the United States.

From his examination of the Sarlane elastomeric fiber with both "light" and scanning electron microscopes to determine its morphol-

ogy, Dr. Golub testified that the structure of Sarlane fiber is innately multifilament, and that there is no merging or mixing of material from one filament to another. He, therefore, concluded that there is no fusion between filaments. Nonetheless, Dr. Golub admitted that Sarlane filaments are lightly cohered at points along the length of the individual filaments. Although he stated that the points of coherence constitute only a very small percentage of the surface area, it is significant to note that he also stated that at these points there is true coherence. Dr. Golub added that he found no foreign material or different molecular material between filaments as there is in bonding.

A photomicrograph of the broken end of one strand of Sarlane yarn, which had been immersed in liquid nitrogen and broken, revealed to Dr. Golub that the individual filaments "act independently because . . . they break at different levels." Another photomicrograph of a direct end view of a strand was partially out of focus. This apparently was due to the higher level of breakage of some filaments as compared to others of the same strand. Dr. Golub was convinced, therefore, that the filaments are cohered only very slightly.

To explain the concept of "coherence" or cohesion, Dr. Golub described two very finely polished plates of steel known in the metallurgical trade as Johanson blocks. Since cohesion is the attraction of molecular forces of the same kind of molecules, the molecular attraction between the two smooth surface areas of the steel plates must be very strong. In fact, Dr. Golub explained, "if you put them together you can't pull them apart. You have to slide them apart." He concluded that the same attraction accounts for the tendency of Sarlane filaments to remain in one group which, admittedly, is a desirable characteristic in multifilament yarns. Dr. Golub posited that due to the low modulus and softness of Sarlane, molecular attraction exists across the flattened interfaces of the individual filaments, and gives true coherence. He admitted, however, that one hundred percent coherence between filaments would result in a monofilament.

Dr. Golub testified that the points of coherence comprise only one percent of the surface area of a fiber, and that these points were very far apart permitting the material in between to extend a great deal. Therefore, if one wishes to bend the Sarlane strand, "there is ample distance for stretch and curvature without involving other filaments." Permitting a short section of Sarlane a few inches long to hang over his finger, Dr. Golub noted the good draping quality, stating that this is peculiar to a multifilament fiber rather than a monofilament. He explained that in the multifil "the only element which is being stretched really is the single fiber at the very outside of the curvature, with the radius of curvature different from that on the inside, and the

individual filaments have room to move and adjust. That is the reason a multifil bends down so easily." He added that a monofilament spandex, such as Vyrene, is stiff due to its monofil character, and does not exhibit the draping quality characteristic of Sarlane.

Dr. Monroe Couper, called as an expert witness on behalf of defendant, received the degrees of bachelor of science and chemistry, master of science, and doctorate degree at the University of Virginia where his doctoral thesis related to organic chemical structure and reaction mechanisms. At present senior research chemist in textiles at the du Pont Company, Dr. Couper has been in the field of polyurethane and spandex fiber structure, preparation, and processing for over fifteen years. At a time when Dr. Peters was also employed by the du Pont Company, Dr. Couper served as supervisor in the field of spandex polymer research.

While agreeing with Dr. Golub that "not a high percentage of the circumference" of the filaments is stuck together, Dr. Couper disagreed that the points of contact are "cohered." Rather, he testified that the filaments at these points are "coalesced, which is to become unitary. . . . [T]he matter flows from one [filament] to the other. . . . That is coalescence. And bonding, very clearly, is used in this sense and fusion is used loosely in this sense."

Dr. Couper testified that the chemical composition common to all spandex fibers is polyurethane, and that the structure of the molecule consists of alternating hard and soft segments along the same polymeric chain. "The consequences are that you have, in the soft material, what could be thought of as springs and you have, in the hard material, where it has come together into clumps, the equivalent of knots or fastening points among these strings or springs. As a result of this, when you pull on the structure, you have a high degree of stretch and, when you let go, the springs recoil and you have a high and rapid recovery. This is the essential element of spandex structure which accounts for its properties."

Dr. Couper commented upon Dr. Peters' discussion of "natural tack," and pointed out that the "tackiness" of Sarlane spandex is particularly evident during the heated drying process. Dr. Couper stated that the "molecules have, at the end or edge of the fiber, an unsatisfied bond or unsatisfied forces . . . [s]o there is a concentration of unsatisfied or high force at the surface of most polymers and of this one [Sarlane] in particular because high bonding forces have been built into the hard segments."

Dr. Couper maintained that during the drying process of Sarlane, "virtually all of the requirements for what I would call autohesion are met in this oven." "Autohesion," he continued, "is the flowing

together of like materials when they are brought in contact." The requirements for *autohesion* are:

(1) the presence of strong bonds at the surface of the molecule;
(2) mobility in the molecules so that these surfaces can move about a little bit and, if they begin to touch at some place, then the bondable sites can migrate a little bit and find each other;
(3) a clean surface.

Dr. Couper concluded that "[v]irtually all of the requirements are factors favoring autohesion which are all present," and the "result would be that the surfaces would affix themselves to one another so thoroughly that they would be essentially unitary, unified. The matter in one [filament] would be virtually continuous into another."

Dr. Couper arrived at this conclusion following an examination of scanning electron micrographs made of Sarlane, and received in evidence as a collective exhibit. Prior to examination in the scanning electron microscope, the Sarlane yarn was, in some cases, frozen "by contact with dry ice, after which it was cut with the sharpest possible blade. . . ."

According to Dr. Couper, defendant's photomicrographs revealed "the merest traces or, in most cases, disappearance of what may have been an initial interface," between touching filaments. He testified that the filaments have become "very nearly unitary to a different degree here and there, so that we have bridges or bonded areas" between them. In his judgment, "autohesion . . . has occurred when these clean, mobile, and highly bondable surfaces have come together with enough degree of force and heat and mobility to cause an autohesion. . . . I would say this is fused."

From his examination, Dr. Couper concluded that the filaments are also self-bonded, or joined "into a unitary material of materials of two substances, by their being sufficiently pressed or moved together, and having sufficient flow that the molecules can get within the usual distance apart at the interface. . . . It is not necessary to have a foreign or third material at the interface to cause self-bonding. Sufficient heat, sufficient solvent, sufficient softness, and some pressure will be adequate."

Another set of photomicrographs of Sarlane, prepared by freezing in liquid nitrogren and breaking mechanically rather than cutting, was introduced into evidence by defendant as a second collective exhibit. Although the filaments appeared to be independent, by breaking at different levels, Dr. Couper pointed out that they were connected by "little bridges where there is a continuation or continuum of mat-

ter," or "points of weld which, in my judgment, are far more than cohesion. The matter is unitary. It is coalescence." See Appendix "A" to this opinion. He stressed that at the bridge or point of weld, the "skin of one [filament] has become the skin of the other." It is at these "little fused bridges that . . . we get the . . . virtual disappearance in localized places of what was originally the interface between the single filaments . . . ."

A third collective exhibit of photomicrographs of Sarlane was introduced by defendant to illustrate "what happens when you try to tear the filaments from one another." When a separate filament is peeled back from the bundle, a membrane, described by Dr. Couper as "a web in the webfoot of a duck," occurs, and the common skin must be ruptured as a result. See Appendix "B" to this opinion. He commented that "these are the bridge structures which are so well coalesced or self-bonded that they are having to be ripped. . . . Grouped filaments don't have, in my experience, this firm a bonding or this flowing together of a bridge." He added: "I cannot make a single tear without finding it [the webbing phenomenon]."

To demonstrate how grouped filaments act independently, defendant introduced into evidence a card, prepared by Dr. Couper, which contained four strands of dacron zero twist thirty-four filament yarn, and one strand of Sarlane, all stretched across the card. When the card was bent, relieving tension from the taut strands, all the grouped filaments of the dacron strands visibly separated from one another. This "splaying out" effect did not take place, and was not observed in the Sarlane strand.

Dr. Couper also described a phenomenon known as "heat setting." He explained that although the true melting and decomposing point of the Sarlane polymer is 240 to 245 degrees centigrade, nevertheless, at temperatures of 190 to 195 degrees centigrade found in the dryer during Sarlane processing, a viscous flow occurs between filaments which permanently deforms them. He emphasized that the "beginning of viscous flow is the place where true coalescence, in its ultimate, takes place."

Dr. Couper testified that viscous flow, which results in a fusion or autohesion of Sarlane filaments at the points of weld, is brought about by the combined "effects of heat and slight pressure" found in the dryer during Sarlane production. "The yarn must be pulled up against gravity and must be extended a little bit so that under the slight pressures that must occur there, and at these high temperatures . . . there will be a fluid-like flow."

The testimony of Dr. Couper, that Sarlane filaments experience pressure in the dryer, is consistent with that of Dr. Peters who stated

that a "very minor amount of tension is put on the yarn" which is drawn vertically upward onto the transfer rolls in the dryer. Dr. Couper explained that "very little pressure would be needed [to fuse the filaments] at the temperatures that these filaments would reach and did reach in the dryer." It is also significant that Dr. Peters, in his discussion of "flow and creep" of the filament molecules at dryer temperatures, stated that "internal stress . . . built into the spandex . . . can be released at those temperatures."

Dr. Golub, called by plaintiff in rebuttal, was critical of the manner in which some of defendant's photographs were prepared. He testified that the skin lines of the filaments photographed by Dr. Couper were "obscured by drag of the material or melt of the material over the skin line by the knife edge" when the samples were cut with a knife. He asserted that "[y]our knife blade will melt . . . the material because of the frictional heat . . . of the edge of the blade" so that "cutting is a melting process." He also attempted to explain that the inability to perceive skin lines in such scanning electron microscope photos was due to the fact that the "scanning electron microscope only shows you the surface "of a cross-section, and that" [y]our cannot see down through it." He stated that when he performed change of focus studies with "transmitted light," he found a "skin line at every one of those junction points [between filaments]." Although Dr. Golub attempted to show that the skin lines at the points of weld or bridges preclude fusion, he nevertheless admitted that "you cannot photograph that transmitted light through and see it clearly."

Dr. Golub disagreed with Dr. Couper that the bridges or points of weld in defendant's photomicrographs represent coalescence of any kind. He did, however, agree with Dr. Couper that "this material pulls out like chewing gum." He denied that self-bonding occurs between Sarlane filaments at the stick points, and attempted to explain the reasons for the "stick points," "bridges," "web" or "duck's web." He added that bumps or asperities on the otherwise smooth filament surfaces "come in contact, and the surfaces at that contact point flatten out and cohesion occurs, then you will have, if you move . . . the filaments apart again, this chewing gum-like stretching out."

Regardless of the reasons or explanation for the phenomena, it is clear that Dr. Golub could not deny the existence of the "stick points," "bridges," or "webs."

In addition to the expert testimony that shows "fusion," defendant stresses that "the balance of the spandex trade in the United States recognizes and indeed treats the subject class of spandex as a monofilament." In support of its position, the defendant cites the "authoritative standard text in the field of spandex fibers" by Dr. R. W. Mon-

crieff, entitled *Man-Made Fibres* (1970), and the definition of elastomeric monofilament of the American Society for Testing Materials.

Defendant also emphasizes that fusion, i.e., autohesion and coalescence, between filaments takes place under the favorable conditions that exist in the dryer during the production of Sarlane. These conditions, enumerated by defendant in its brief, include:

(1) the presence of strong molecular bonds;
(2) the substantial heat applied in the drying chamber;
(3) the "tackiness" of the spandex surfaces in clean state; and
(4) the slight pressure exerted upon the fiber in the production process.

Although the temperature in the dryer does not exceed 190 to 195 degrees centigrade, Dr. Couper testified that at temperatures within fifty degrees of the melting and decomposing point of the polymer, viscous flow can occur nonetheless. As previously noted, this concept known as "heat setting" is a phenomenon which makes fusion or autohesion possible below the melting and decomposing point of Sarlane.

Dr. Couper's testimony was confirmed by defendant's photomicrographs of cross sections of Sarlane yarn prepared by breaking in liquid nitrogen. These photomicrographs are free from Dr. Golub's criticism relating to distortion caused by cutting yarn samples with a knife, or in a microtome for microscopic examination. One such photomicrograph clearly reveals "little bridges or points of weld" connecting the Sarlane filaments. See Appendix "A."

It is at this bridge or point of weld that, when a filament is peeled back from the main bundle, there appears a web between filaments. See Appendix "B." As explained by Dr. Couper, "these are the bridge structures which are so well coalesced . . . that they are having to be ripped." Defendant's photomicrographs of filaments torn from one another clearly show this webbing phenomenon.

Although plaintiff believes the contrary, its own photograph, Appendix "C" to this opinion, fails to establish that fusion does not occur between Sarlane filaments. Pointing to the encircled portions of the photograph, Dr. Golub attempted to indicate a skin line between adjacent filaments. The two squares or blocks on that same photograph, however, show no discernible or visible skin lines. Notwithstanding Dr. Golub's assertion that faint lines exist, it is clear that at least at these points the filaments are not independent but are manifestly fused.

In customs classification cases, it is fundamental that plaintiff bears the dual burden of proving that the classification ascribed to the merchandise by the customs officials is wrong, and that the

plaintiff's claimed classification is correct. The presumption of correctness rests on firm judicial authority. In the past it enjoyed statutory dignity only in reappraisement cases. Since 1970, it was incorporated into the Customs Courts Act of 1970 and is now expressly made applicable "[i]n any matter in the Customs Court."

In *United States* v. *New York Merchandise Co., Inc.*, 58 CCPA 53, C.A.D. 1004, 435 F. 2d 1315 (1970), the Court of Customs and Patent Appeals reaffirmed and emphasized the importance of the presumption of correctness, and the dual burden that must be borne by the plaintiff. By a preponderance of the evidence, it is the plaintiff who must persuade the court that the Customs classification is wrong and that the claimed classification is correct. *United States* v. *New York Merchandise Co., Inc., supra; Technical Tape Corp.* v. *United States*, 55 CCPA 38, C.A.D. 931 (1968). In the language of the *New York Merchandise* case, it is plaintiff who must bear "the ultimate burden of persuasion." 58 CCPA at 58.

What is obvious, that customs classification cases are seldom free from all doubt, has on occasion been specifically articulated. *Vilem B. Haan et al.* v. *United States*, 67 Cust. Ct. 104, C.D. 4260, 332 F. Supp. 182 (1971). From an evidentiary standpoint, whether plaintiff in a particular case has borne the dual burden of proof is often a difficult and close question. *Automotive Tire Service, Inc.* v. *United States*, 66 Cust. Ct. 305, C.D. 4208 (1971). In the case at bar, the specific question presented is whether plaintiff has established or persuaded the court, that the "Sarlane" spandex fiber has been erroneously classified under the tariff provision for "monofilaments," and that it should have been properly classified under the provision for "multifilaments," or "grouped filaments." Notwithstanding the competent and thorough presentation, the plaintiff has not succeeded in meeting its dual burden. It is, therefore, the determination of this court that its claim must fail.

In order to prevail, it was incumbent upon plaintiff to establish that "Sarlane" consisted of "multifilaments" or "grouped filaments," and not "monofilaments" within the meaning of the Tariff Schedules of the United States. As was indicated previously, the statutory definition of "monofilaments" is not limited to single filaments, but "embraces," i.e., includes single filaments "produced from two or more filaments fused or bonded together." The crucial question, therefore, is not whether "Sarlane" is a single filament, i.e., "a monofilament," but rather, whether it is "produced from two or more filaments fused or bonded together."

After a careful study of the exhibits and the expert testimony, the court has concluded that the individual filaments in "Sarlane" have been fused or bonded together in the process of its production.

The expert testimony described the manufacture or production of Sarlane. It cannot be doubted that the drying process is of special importance. Although the witnesses agreed upon the nature of the process and the filaments, they differed on the precise effect of the process upon the filaments, and whether it caused or constituted a "fusing" or "bonding."

Some of the testimony left the impression that the words "fused" or "fusion" were studiously avoided. From some of the testimony of plaintiff's witnesses, the fusion of the filaments in the production of Sarlane was not enough because it occurred at only a small percentage of the surface area. On this crucial phase of the case the court accepts the testimony and conclusion of Dr. Couper that the filaments have been fused.

Much of the testimony that deals with "viscous flow," "flow and creep," "tackiness," "webbing," "breaking," "fastening points" and the like is best explained by Dr. Couper. The court finds his testimony plausible and credible, and fully supported by the exhibits.

The president of plaintiff corporation, Dr. Peters, and Dr. Golub, who supported his testimony, were vigorous in their view that the filaments were neither fused nor bonded. They were unable, however, to deny those factors or phenomena that caused Dr. Couper, defendant's expert, to testify that the filaments were "coalesced," "unitary," "unified" or "fused." Notwithstanding the various labels designed to describe what occurred to the filaments in the drying process of the production of Sarlane, such as "natural tack," "points of weld," "fastening points," "stick points" or "web," it would seem clear that the filaments were thereafter no longer independent filaments.

It may be well to add that plaintiff's reliance upon the example of the Johanson blocks is misplaced, since it does not answer the question whether Sarlane filaments were fused or bonded together during production. In the drying process of Sarlane, the filaments are subjected to temperatures which cause a "flow and creep" or "viscous flow." As a consequence, one filament cannot be removed or separated from another without causing a "webbing" or "tearing." On the other hand, the Johanson blocks upon separation remain intact and fully independent.

The defendant did not merely rely upon the presumption of correctness that attaches to the classification of the customs officials. It came forward with credible and reliable evidence in support of the classification of the merchandise. Since the court is in agreement with the factual conclusions submitted by the defendant's expert, it is clear that plaintiff has not borne its burden of proof.

On the record before the court, after a careful study of the testimony of the witnesses and the exhibits, it is the determination of the court that plaintiff has not succeeded in proving that Sarlane was a multifilament, i.e., grouped filaments, as claimed, and not a monofilament, as classified.

In view of the foregoing, the protest is overruled and the classification is sustained.

Judgment will issue accordingly.

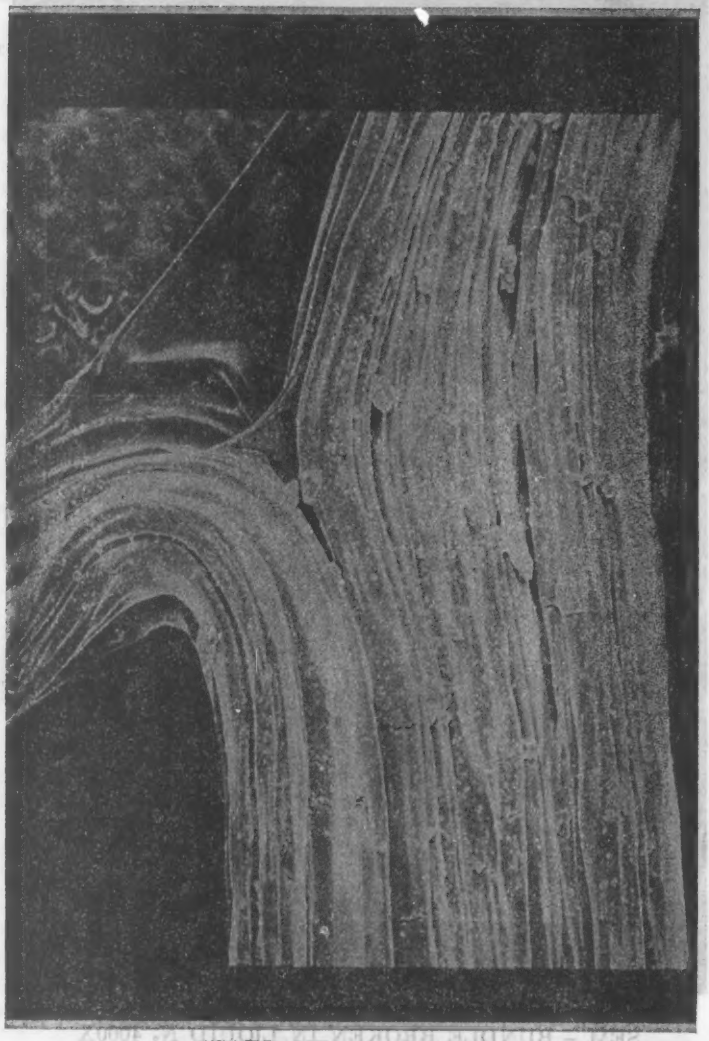
APPENDIX A

Defendant's Exhibit E,
Photomicrograph #4.

"SARLANE" 280 DENIER
SEM – BUNDLE BROKEN IN LIQUID N_2 4000X

APPENDIX B

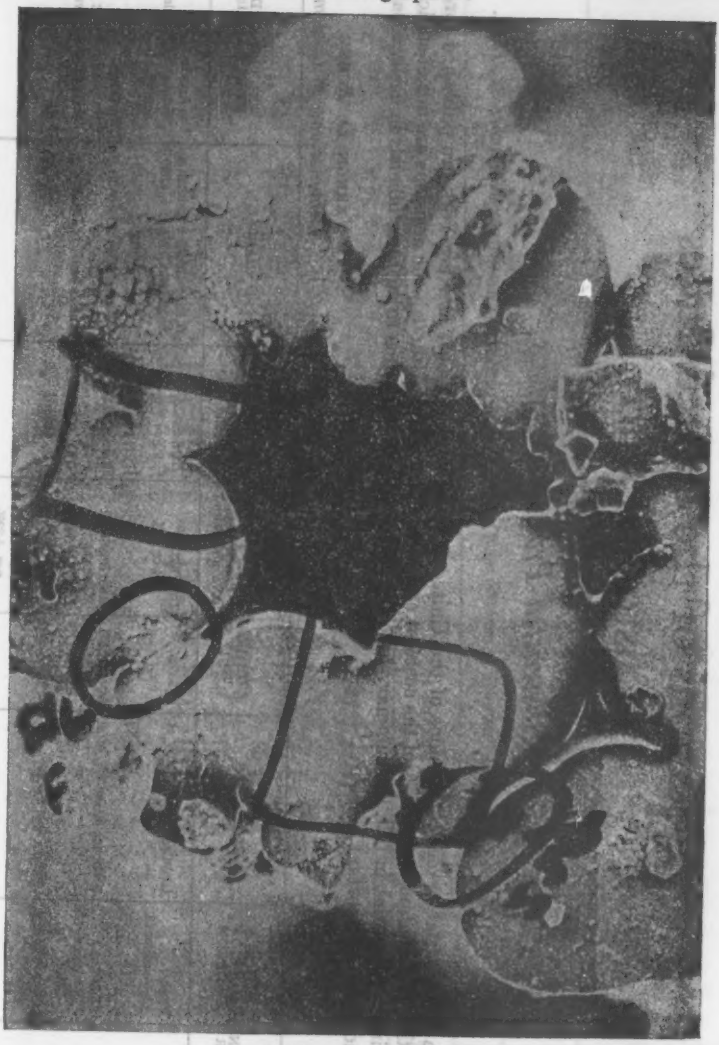
Defendant's Exhibit F,
Photomicrograph #4.



"SARLANE" 280 DENIER
SEM – BUNDLE SEPARATED BY PULLING APART BY HAND – 400X

APPENDIX C

Plaintiff's Exhibit 7,
Photomicrograph D.



Sarlane, 70 denier
SEM – 1530X

Decisions of the United States Customs Court

Abstracts

Abstracted Protest Decisions

DEPARTMENT OF THE TREASURY, *November 22, 1976.*

The following abstracts of decisions of the United States Customs Court at New York are published for the information and guidance of officers of the customs and others concerned. Although the decisions are not of sufficient general interest to print in full, the summary herein given will be of assistance to customs officials in easily locating cases and tracing important facts.

VERNON D. ACREE,
Commissioner of Customs.

DECISION NUMBER	JUDGE & DATE OF DECISION	PLAINTIFF	COURT NO.	ASSESSED	HELD	BASIS	PORT OF ENTRY AND MERCHANDISE
				Par. or Item No. and Rate	Par. or Item No. and Rate		
P76/270	Ford, J. November 18, 1976	Quon Quon Company et al.	69/53585, etc.	Item 653.37 17% or 15%	Item 653.35 9% or 8%	U.S. v. Morris Friedman & Co. (C.A.D.'s 1156, 1157)	Los Angeles Candlesticks, candleholders, etc.
P76/271	Landis, J. November 18, 1976	National Silver Co. et al	66/44652, etc.	Item 533.31 or 533.33 10¢ per doz. pcs. +25% Item 533.37 10¢ per doz. pcs. +22%	Item 533.14 12.5% Item 533.16 6.25%	National Silver Co. v. U.S. (C.D. 2894) Enesco Imports, Inc. v. U.S. (C.D. 3423)	San Diego Ceramic products; Rockingham earthenware

				10¢ per doz. pcs. +22%			

Decisions of the United States Customs Court

Abstract

Abstracted Reappraisement Decisions

DECISION NUMBER	JUDGE & DATE OF DECISION	PLAINTIFF	COURT NO.	BASIS OF VALUATION	HELD VALUE	BASIS	PORT OF ENTRY AND MERCHANDISE
R76/125	Newman, J. November 18, 1976	Lesco Rubber Co.	R61/19632, etc.	American selling price	As set forth on schedule, attached to decision and judgment, under the heading "Claimed Value Per Pair"	Agreed statement of facts	Norfolk Footwear

International Trade Commission Notices

Investigations by the United States International Trade Commission

DEPARTMENT OF THE TREASURY, *December 2, 1976.*

The appended notices relating to investigations by the United States International Trade Commission are published for the information of Customs Officers and others concerned.

VERNON D. ACREE,
Commissioner of Customs.

[TA-201-19]

TELEVISION RECEIVERS, COLOR AND MONOCHROME, ASSEMBLED OR NOT ASSEMBLED, FINISHED OR NOT FINISHED, AND SUBASSEMBLIES THEREOF

Notice of Investigation and Hearings

Investigation instituted. Following receipt on September 22, 1976, of a petition filed by the Industrial Union Department, AFL–CIO; Allied Industrial Workers of America, International Union; American Flint Glass Workers Union of North America; Communications Workers of America; Glass Bottle Blowers' Association of the United States and Canada; Independent Radionic Workers of America; International Association of Machinists; International Brotherhood of Electrical Workers; International Union of Electrical, Radio and Machine Workers; United Furniture Workers of America; United Steelworkers of America; Corning Glass Works; GTE Sylvania Incorporated; Owens-Illinois, Inc.; Sprague Electric Company; and Wells-Gardner Electronics Corp., the United States International Trade Commission, on October 21, 1976, instituted an investigation under section 201(b) of the Trade Act of 1974 to determine whether television receivers, color and monochrome, assembled or not assembled, finished or not finished, and subassemblies thereof, provided

for in item 685.20 of the Tariff Schedules of the United States, are being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry producing an article like or directly competitive with the imported article.

Public hearings. Public hearings in connection with this matter will be held beginning Tuesday, January 11, 1977, in Chicago, Illinois, at a time and place to be announced; and in Washington, D.C., beginning at 10 a.m., e.s.t., Tuesday, January 18, 1977, in the Hearing Room of the United States International Trade Commission Building, 701 E Street NW. Requests for appearances should be filed with the Secretary of the United States International Trade Commission, in writing, at his offices in Washington, D.C., not later than noon of the fifth calendar day preceding the hearing at which an appearance is requested.

Inspection of petition. The petition filed in this case is available for public inspection at the Office of the Secretary, United States International Trade Commission, 701 E Street NW., Washington, D.C. 20436, and at the New York City office of the United States International Trade Commission located at 6 World Trade Center.

By order of the Commission:

KENNETH R. MASON,
Secretary.

Issued November 9, 1976

Index

U.S. Customs Service

Customhouse Broker's License; time at which examination will be given; sec. 111.13(b), C.R., amended ..... T.D. No. 76-329

Foreign currencies:
- Daily rates for Hong Kong dollar, Iran rial, Philippines peso, Singapore dollar and Thailand baht (tical):
  - October 25–29, 1976 76-330
  - November 1–5, 1976 76-332
  - November 8–12, 1976 76-334
- Rates which varied from T.D. 76-293:
  - October 25–29, 1976 76-331
  - November 1–5, 1976 76-333
  - November 8–12, 1976 76-335

Customs Court

Construction; Tariff Schedules of the United States:
- Item 309.03, C.D. 4673
- Item 309.06, C.D. 4673
- Item 309.31, C.D. 4673
- Schedule 3, part 1, subpart E, headnote 3(b), C.D. 4673

Definition (*see* Words and phrases)

Elastomeric fiber; multifilament yarn, C.D. 4673

Grouped filaments; monofilaments, C.D. 4673

Monofilaments; grouped filaments, C.D. 4673
Multifilament yarn; elastomeric fiber, C.D. 4673

Words and phrases:
- Bonding, C.D. 4673
- Fused or bonded, C.D. 4673
- Fusing, C.D. 4673
- Grouped filaments, C.D. 4673
- Monofilaments, C.D. 3674
- Multifilaments, C.D. 4673

International Trade Commission Notices

Television receivers, color and monochrome, assembled or not assembled, finished or not finished, and subassemblies thereof; notice of investigation and hearings; TA-201-19; p. 30.

UNITED STATES
GOVERNMENT PRINTING OFFICE
PUBLIC DOCUMENTS DEPARTMENT
WASHINGTON, D.C. 20402

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. GOVERNMENT PRINTING OFFICE
375

U.S.MAIL

U. S. GOVERNMENT PRINTING OFFICE: 1978